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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,496	04/08/2004	Chao-Yang Hsu	37538	7286

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EXAMINER

KAPLAN, HAL IRA

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/820,496

Applicant(s)

HSU ET AL.

Examiner

Hal I. Kaplan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/8/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The disclosure is objected to because of the following informalities: Paragraph 2, line 3 contains the phrases "power mold" and "back-up mold". It appears these should be "power mode" and "back-up mode". Paragraph 4, line 2 contains the word "conducted". It appears this should be "conductive". Paragraph 4, line 3 contains the phrase "shorted in". It appears this should be "shorted for". Paragraph 4, line 6 contains the word "charge". It appears this should be "charging". Paragraph 4, lines 1-2 state that Q3 and Q4 have to be controlled to be conductive. It is not clear why Q1 and Q2 are not relevant with regard to this. Paragraph 4, line 5 contains the phrase "current for maintaining". The specification does not say what is being maintained.

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Paragraph 5, lines 2-3 contain the phrase "carving unflaggingly ... wholehearted experience and research". It is not clear to the examiner what this means. Paragraph 6, line 9 contains the phrase "devices respectively". It appears this should be "devices each respectively".

Paragraph 6, line 17; paragraph 9, line 3; paragraph 11, line 14; paragraph 14, line 3; paragraph 24, lines 5-6; and paragraph 30, lines 25-26 contain the phrases "through a conduction and a cut-off" and "one of a conduction and a cut-off therebetween". It is not clear to the examiner what this means, as a conduction and a cut-off are operating states and not apparatuses or devices through which the energy storage and supply device can be charged. Paragraph 23, lines 17 and 18 contain the phrase "output end". It appears this should be "output". Paragraph 23, lines 19 and 21 contain the phrase "conducting end". This is incorrect terminology and should be "source" or "drain". Paragraph 23, line 28 contains the phrase "controlled through a conduction and a cut-off". It is not clear to the examiner what this means. Paragraph 24, lines 1-3 contain the phrase "meanwhile ... power MOSFET". It appears this should be "meanwhile, the gate control switch devices can be power MOSFETs and the anti-parallel diodes can be intrinsic anti-parallel diodes of the power MOSFETs. Paragraph 26 is not in proper idiomatic English and is unclear.

Paragraph 27, line 1 and paragraph 28, line 1 contain the word "conducted". It appears this should be "conductive". Paragraph 27, line 3 and paragraph 28, line 3 contain the phrase "conducted for shorting the transformer 207 in". It appears this should be "conductive, thus shorting the transformer 207 for". Paragraph 29, line 2

contains the word "designed". It appears this should be "selected". Paragraph 31 is not in proper idiomatic English and is unclear. Paragraph 32, line 1 and paragraph 33, line 1 contain the word "conducted". It appears this should be "conductive". Paragraph 32, line 3 and paragraph 33, line 3 contain the phrase "conducted for shorting the transformer 307 in". It appears this should be "conductive, thus shorting the transformer 207 for".

Appropriate correction is required.

Drawings

4. The drawings are objected to because of the following informalities: Figures 1-3 contain 2 unidentified inductors and an unidentified resistor connected to the primary of the transformer, and an unidentified inductor and resistor connected to the secondary of the transformer. These appear to be RL filters, but are not labeled in the drawings or disclosed in the specification.
5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 103, 104, and 108 in Figure 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claims 4 and 10 are objected to because of the following informalities: Claim 4, line 3 and claim 10, line 3 contain the phrase "for determining one of a conduction and a cut-off therebetween". It appears this should be "for connecting and disconnecting said main power and said output terminal". Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The phrase "a conduction and a cut-off of said charging switch device" in claims 1 and 7 is used by the claim to mean "devices or apparatuses through the

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electrical energy storage and supply device is charged", while the accepted meaning is "the operating states of the charging switch device wherein the switch device is closed and open, respectively." The term is indefinite because the specification does not clearly redefine the term. Claims 2-6 and 8-12 inherit this deficiency.

Allowable Subject Matter

10. Claims 1-12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

11. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-6 contain allowable subject matter because none of the prior art of record discloses or suggests a charging switch having a first conducting terminal electrically connected to a common cathode of two diodes connected to the two output terminals of a bridge switch device and a second conducting terminal electrically connected to a negative electrode of an electrical energy storage and supply device, in combination with the remaining claimed features.

Claims 7-12 contain allowable subject matter because none of the prior art of record discloses or suggests a bridge rectifier having an input end electrically connected to the output of an inverter in parallel, and a charging switch device electrically connected to an output end of the bridge rectifier, in combination with the remaining claimed features.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
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